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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,248	01/11/2002	Karine Ragil	PET-1710 C1	6990
23599 7590 01/03/2007 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			EXAMINER NGUYEN, TAM M	
			ART UNIT 1764	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/042,248

Applicant(s)

RAGIL ET AL.

Examiner

Tam M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 11-34 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9, 11-34 and 38-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 7, 12-25, 29-34, 38, 39, and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation “wherein the feed is a fresh feed not previously treated as to separated di-branched and tri-branched paraffins therefrom” in claims 6, 38, and 39 was not described in the specification at the time the application was filed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-9, 11, 40, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stem et al. (US 4,982,048).

Stem discloses an isomerization to produce components for gasoline pool. The process comprises passing a hydrocarbon feed comprising C₆₊ including C₇ and C₅ components into an isomerization zone to produce a mixture comprising multi-branched paraffins (e.g., di and tri-branched paraffins), mono-branched paraffin, and normal paraffin. The mixture is then passed into a separation zone to produce a multi-branched paraffinic (e.g., di and tri-branched paraffins) stream, a mono-branched paraffin stream, and normal paraffin stream. Stem also teaches that the process may comprise two separated isomerization zones with the normal paraffins being isomerized in the first zone and the mono-methyl paraffins being isomerized in the second zone. The isomerization process is operated at temperatures ranging from 200° to 400° C and pressures ranging from 10-40 bars (1 to 4 Mpa). The isomerization process is operated in the presence of

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hydrogen and catalyst. It is noted that Stem does not disclose that the isomerization feed comprises multi-branched paraffins. However, there no separation is 100% effective. Therefore, it would be expected that the isomerization feed from the upstream separation zone would comprises at least some small amount of multi-branched paraffins. (See col. 3, line 55 through col. 4, line 57; col. 9, lines 14-53, and 68; column 10, lines 1-15; column 11, lines 46-68; column 12, lines 1-22; col. 17, lines 9-33; and Figures 2-7)

Stem does not specifically disclose that the multi-branched paraffin stream provides a minimum content of 2 % weight of C₇ di-branched paraffins, does not disclose the locations and the zones as in claim 9, and does not disclose that the feed is a fresh feed not previously treated as to separated di-branched and tri-branched paraffins therefrom

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by using a feed comprising the claimed amount of C₇ paraffins because Stem teaches that the feedstock can comprises quantities of C₇ paraffins (see col. 5, lines 57-62). Therefore, one of skill in the art would utilize a feedstock comprising any amount of C₇ paraffins including the claimed amount with the expectation that a feedstock comprising any amount of C₇ paraffins would be effectively processed in the process of Stem. As a result, it would be expected the product steam would comprise at least 2 wt.% of C₇ di-branched paraffins.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by locating the zones as in claim 9 because the process of Stem is a cyclic process and the locations of the zones would not affect the outcome of the process since the feed is ultimately passed through each zone.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by omitting the pre-treating step when fresh feed comprised primary n-paraffins is used.

Response to Arguments

The argument that the present application will reasonably convey to one of skill in the art the concept that the feed is fresh not previously treated is not persuasive. The present application as a whole does not suggest or disclose that the feed has not been previously treated. Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) (“[the] specification, having described the whole, necessarily described the part remaining.”). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff ’d mem.*, 738 F.2d 453 (Fed. Cir. 1984).

The argument that it is no possible reason to modify Stem to eliminate the separation zone is not persuasive. Stem primary purpose to isomerize only the normal paraffins. Therefore, one of skill in the art would omit the pre-treating step when a feed comprises primary normal paraffins.

The Declaration filed on October 16, 2006 has been fully considered but it is not persuasive. From page 12 and 13 of the present specification, it is not clear that if the feed has not been pre-treated. For example, on page 11, it is state that the feed is originated from atmospheric distillation. This atmospheric distillation step can be a pre-treating step.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

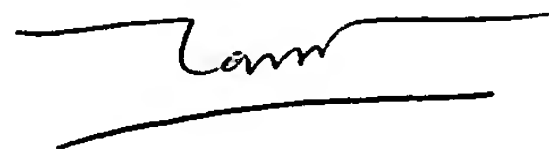
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tam M. Nguyen
Examiner
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A handwritten signature in black ink, appearing to read 'Tam', is written over a horizontal line.

TN